

WHAT IS CLAIMED IS:

1. A method of utilizing and modifying a grammar in a semantic parser, the method comprising:
  - identifying a set of surface semantic non-terminals from user input using a context-free grammar;
  - using a semantic description language grammar that describes relationships between semantic non-terminals to identify a semantic parse based in part on the identified semantic non-terminals;
  - receiving an instruction to change the semantic description language grammar;
  - and
  - changing the semantic description language grammar based on the instruction.
2. The method of claim 1 wherein changing the semantic description language grammar comprises deactivating a semantic entity in the grammar such that the semantic entity remains in the grammar but is not used to identify semantic parses.
3. The method of claim 1 wherein changing the semantic description language grammar comprises activating a semantic entity in the grammar that has previously been deactivated.
4. The method of claim 1 wherein changing the semantic description language grammar comprises combining a second semantic description language

grammar with the semantic description language grammar.

5. The method of claim 1 wherein changing the semantic description language grammar comprises inserting a semantic entity into the semantic description language grammar.

6. The method of claim 1 wherein changing the semantic description language grammar comprises deleting a semantic entity from the semantic description language grammar.

7. The method of claim 6 wherein deleting a semantic entity comprises deleting a non-terminal from the semantic description language grammar.

8. The method of claim 7 wherein deleting a non-terminal comprises:

determining that the non-terminal is defined at least in part by a child semantic entity that does not define another non-terminal in the semantic description language grammar; and deleting the child semantic entity based on the determination.

9. The method of claim 7 wherein deleting a non-terminal comprises:

determining that the non-terminal is defined at least in part by a child surface semantic non-terminal in the context free grammar that does not define

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another non-terminal in the semantic description language grammar; and deleting the child surface semantic non-terminal from the context-free grammar based on the determination.

10. The method of claim 9 wherein deleting the child surface semantic non-terminal comprises:

determining if the child surface semantic non-terminal is defined by a rule that does not define another child surface semantic non-terminal; and deleting the rule based on the determination.

11. A computer-readable medium having computer-executable instructions for performing steps comprising:

receiving an instruction to change a grammar used in semantic parsing of text; accessing a stored grammar formed through the combination of a context-free grammar that links text to semantic non-terminals and a semantic description language grammar that links semantic non-terminals to each other; and changing the stored grammar based on the received instruction.

12. The computer-readable medium of claim 11 wherein changing the stored grammar comprises changing only the semantic description language grammar.

13. The computer-readable medium of claim 11 wherein receiving an instruction to change the grammar comprises receiving an instruction to change a non-terminal in the semantic description language grammar.

14. The computer-readable medium of claim 13 wherein changing the stored grammar comprises changing a non-terminal in the semantic description language and a non-terminal in the context-free grammar.

15. The computer-readable medium of claim 14 wherein receiving an instruction comprises receiving an instruction to delete a non-terminal from the semantic description language and wherein changing the stored grammar comprises deleting the non-terminal from the semantic description language and a non-terminal from the context-free grammar based on the instruction.

16. The computer-readable medium of claim 11 wherein changing the stored grammar comprises deleting a single rule associated with a non-terminal in the context-free grammar.

17. The computer-readable medium of claim 11 wherein changing the stored grammar comprises inserting a single rule for a non-terminal in the context-free grammar.

18. A method of performing semantic parsing of an input text, the method comprising:

receiving an instruction to change a rule  
that defines a non-terminal in a  
semantic grammar;  
changing the rule without affecting other  
rules that define the non-terminal; and  
using the semantic grammar after the change  
to form a semantic parse of the input  
text.

19. The method of claim 18 wherein changing a  
rule comprises deleting a rule.

20. The method of claim 18 wherein changing a  
rule comprises adding a rule.

21. A method of parsing text to form a semantic  
structure, the method comprising:  
identifying possible semantic structures for  
the text;  
retrieving a focus structure that indicates  
an expected semantic structure; and  
returning only those semantic structures  
that correlate to the focus structure.

22. The method of claim 21 further comprising  
before identifying a possible semantic structure for  
the text, forming the focus structure.

23. The method of claim 21 wherein forming the  
focus structure comprises forming the focus structure  
based on a dialogue state.

24. The method of claim 21 wherein returning only those semantic structures that correlate to the focus structure comprises only returning those semantic structures that completely define a non-terminal in the focus structure.

25. The method of claim 24 wherein returning only those semantic structures that correlate to the focus structure further comprises only returning those semantic structures that span all of the text.

26. A computer-readable medium having computer-executable instructions for performing steps comprising:

- parsing a text to form candidate semantic parses;
- comparing the candidate semantic parses to a focus parse; and
- giving preference to a candidate semantic parse that best matches the focus parse.

27. The computer-readable medium of claim 26 wherein giving preference to a candidate semantic parse comprises returning only the candidate semantic parse that best matches the focus parse.

28. The computer-readable medium of claim 26 wherein giving preference to a candidate semantic parse comprises giving preference to a candidate semantic parse that fully defines a non-terminal in the focus parse.

